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Hidden threats revealed

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Prepositions

Accompanying the dissertation

Hidden threats revealed – Revealing potentially toxic phytoplankton species and their associated toxins in Ambon Bay, Eastern Indonesia

By

Sem Likumahua

1. *Pyrodinium bahamense* var. *compressum* is the main producer of saxitoxin in Ambon Bay (This thesis).
2. *Pyrodinium bahamense* var. *compressum* blooms in Eastern Indonesia can be associated with massive fish kills in local aquaculture (This thesis).
3. Ambon Bay is subject to future amnesic shellfish poisoning events as domoic acid and its producers, *Pseudo-nitzschia* spp., are persistently detected in phytoplankton samples (This thesis).
4. *Gymnodinium catenatum* is a PST producer in Ambon Bay, which mainly produces decarbamoyl and N-sulfocarbamoyl toxin analogues (This thesis).
5. Ambon Bay sediments harbour high amounts of potentially harmful dinocysts and therefore serve as a seedbank for future harmful algal blooms and toxic events (This thesis).
6. Field data on cells and associated toxins need to be confirmed and supported by culture experiments to generate a better understanding of species specific toxin production and their dynamics under various environmental scenarios.
7. To develop good HAB management and policies in Ambon as well as in Indonesia, toxin components and levels have to be monitored continuously both in plankton samples and in shellfish flesh.
8. Ambon Bay needs an effective wastewater management in order to minimize the risk of (toxic) algal outbreaks due to eutrophication.
9. Knowledge is power. Power to do evil…or to do good. Power itself is not evil. So knowledge itself is not evil (Veronica Roth, Allegiant).